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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,564

11/02/2005

Tong-Sok Kim

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08/19/2008

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,564

Applicant(s)

KIM ET AL.

Examiner

Andrew C. Lee

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-12, 15-17 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 13, 14, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/08)
Paper No(s)/Mail Date 5/12/2008, 11/13/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action in response to the Application #10529564 filed on 11/02/2005 is entered.

Claims 1 – 19 are hence entered and presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 5/12/2008, 11/13/2007 was filed and, the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The abstract of the disclosure is objected to because the abstract of the disclosure submitted on 03/28/2005 does not commence on a separate sheet in accordance with 37 CFR 1.52 (b) (4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claims 2, 6, 9, 13, 16 are objected to because of the following informalities:

Regarding claim 2, the acronym "HAS" disclosed in the claim is very ambiguous and is contradict with what is specified and disclosed in the specification, in the specification, "HAS" refers to home automation server, see page 6, line 9, and lines 11 – 12, page 8 etc., while in the claim, "HAS" refers to home automation service. Clarification is required.

Regarding claim 6, the acronym "LAPD" in line 11 should be spelled out in full text at least once in the claim. For example, Link Access Protocol D-channel (LAPD). This also reflects the text in the specification.

Regarding claim 9, the claim has the same deficiencies as addressed in claim 2 above.

Regarding claim 13, the claim has the same deficiencies as addressed in claim 6 above.

Regarding claim 16, the claim has the same deficiencies as addressed in claim 2 above.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the home communication server" in line 8 (page 2). There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the received HAS message format" in lines 4 – 5 (page 3), and "the wireless HAS circuit and the wired HAS circuit" in lines 7 – 8 (page 3). There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the home communication means" in lines 5 – 6 (page 3). There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the ISDN D channel (LAPD) protocol standard" in line 11 (page 4). There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the home communication server" in line 8 (page 5). There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the received HAS message format" in lines 10 – 11 (page 6), and "the wireless HAS circuit and the wired HAS circuit" in lines 14 – 15 (page 6). There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the home communication server" in line 7 (page 8). There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the ISDN D channel (LAPD) protocol standard" in line 11 (page 10). There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 8, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Bossemeyer et al. (US 20020037004 A1).

Regarding claims 1, 8, 15, Bossemeyer et al. disclose a home automation communication system, and method using advanced asymmetric digital subscriber line (ADSL) ("home gateway system ...home automation", "ADSL"; Fig. 1, paragraphs [0027], [0030], [0032]), comprising: a home automation communication server for providing a home automation service ("internet service provider" interpreted as home automation communication server; Fig.1, paragraph [0032]); a home automation service channel means included in an ADSL terminal for transmitting/receiving data with home automation devices in wired or wireless communication mode using low rate signals ("telephone functions connected to a variety of communication carriers" interpreted as a home automation service channel means, and "home gateway system" interpreted as an ADSL terminal; paragraph [0032], Fig. 15, paragraph [0056]); and a home automation multiplexing means included in an ADSL accessing means for multiplexing data between the home communication server and the home automation service channel means ("element 124 multiplexer" ...and "transceiver" interpreted as a home automation multiplexing means included in an ADSL accessing means; Fig. 6, paragraph [0041]).

Claim Rejections - 35 USC § 103

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 9, 16, 3, 10, 17, 4, 11, 5, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bossemeyer et al. (US 20020037004 A1) in view of Eames (US 6208637 B1).

Regarding claims 2, 9, 16, Bossemeyer et al. disclose the system, method as recited in claimed wherein the home automation service channel means (telephone functions connected to a variety of communication carriers" interpreted as a home automation service channel means; paragraph [0032], Fig. 15, paragraph [0056]) includes: a wireless home automation service means for performing functions of a wireless home network and a wireless home automation interface ("the transceiver can also be used to establish a communication channel over a wireless local loop for home automation" interpreted as a wireless home automation service means; paragraph [0030]); a wired home automation service means for performing functions of a wired home network and a wired home automation interface ("the router is connected to a television processing system and a home automation and security system" interpreted as a wired home automation service means; paragraph [0037], Fig. 4).

Bossemeyer et al. do not disclose a home automation service (HAS) framer connected to a low rate processing unit of ADSL termination unit - remote (ATU-R) for generating a HAS message format based on message types and information

parameters and transferring data to the low rate processing unit and extracting a message type and information parameter from the received HAS message format from the low rate processing unit ; and a HAS agent for receiving messages and information parameter from the HAS framer, performing a home service process and transferring home automation data to the wireless HAS circuit and the wired HAS circuit.

Eames in the same field of endeavor teach a home automation service (HAS) framer connected to a low rate processing unit of ADSL termination unit - remote (ATU-R) for generating a HAS message format based on message types and information parameters and transferring data to the low rate processing unit and extracting a message type and information parameter from the received HAS message format from the low rate processing unit ("ATM framer" interpreted as a home automation service (HAS) framer; Fig. 17, col. 17, lines 26 – 35, Fig. 2); and a HAS agent for receiving messages and information parameter from the HAS framer, performing a home service process and transferring home automation data to the wireless HAS circuit and the wired HAS circuit ("DMT processor" interpreted as a HAS agent; col. 17, lines 30 – 40).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of a home automation service (HAS) framer connected to a low rate processing unit of ADSL termination unit - remote (ATU-R) for generating a HAS message format based on message types and information parameters and transferring data to the low rate processing unit and extracting a message type and information parameter from the received HAS message format from the low rate processing unit ; and a HAS agent for

receiving messages and information parameter from the HAS framer, performing a home service process and transferring home automation data to the wireless HAS circuit and the wired HAS circuit as taught by Eames. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (as suggested by Eames, see col. 1, lines 19 – 21).

Regarding claims 3, 10, 17, Bossemeyer et al. disclose the system, method as recited in claimed wherein the home automation service multiplexing means ("element 124 multiplexer" ...and "transceiver" interpreted as a home automation multiplexing means included in an ADSL accessing means; Fig. 6, paragraph [0041]) includes: a home automation service processing means connected to the home automation communication means for performing home automation service process and transmitting/receiving data with the home automation service channel means through the low rate frame accessing means ("telephone functions connected to a variety of communication carriers" interpreted as a home automation service processing means, and "Internet Service Provider" interpreted as home automation communication means an ADSL terminal; paragraph [0032], Fig. 15, paragraph [0056]).

Bossemeyer et al. do not disclose a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for receiving and transferring low rate data.

Eames in the same field of endeavor teach a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for

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receiving and transferring low rate data ("an analog POTs linecard" interpreted as a low rate frame accessing means, and Host Digital Terminal (HDT) as ATU-C; Fig. 4, col. 6, lines 37 – 54).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for receiving and transferring low rate data as taught by Eames. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (as suggested by Eames, see col. 1, lines 19 – 21).

Regarding claims 4, 11, Bossemeyer et al. disclose the system as recited claimed wherein the advanced ADSL ("ADSL"; paragraph [0033]).

Bossemeyer et al. do not disclose the system as recited claimed wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method.

Eames in the same field of endeavor teaches the system as recited claimed wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method (the use of Discrete Multitone (DMT)).... "generating the POT's signal externally and combining it with the ADSL signal"; col. 10, lines 24 – 36).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of the system as recited claimed wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method as taught by Eames. One of ordinary skill in the

art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (as suggested by Eames, see col. 1, lines 19 – 21).

Regarding claims 5, 12, Bossemeyer et al. disclose the system as recited in claimed wherein the advanced ADSL ("ADSL"; paragraph [0033]).

Bossemeyer et al. do not disclose the system as recited in claimed wherein the advanced ADSL includes an asynchronous transfer mode (ATM).

Eames in the same field of endeavor teaches the system as recited in claimed wherein the advanced ADSL includes an asynchronous transfer mode (ATM) ("Asynchronous Transfer Mode (ATM)"; col. 1, lines 63 – 67, col. 2, lines 1 – 3).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Suzuki et al. to include the features of the system as recited in claimed wherein the advanced ADSL includes an asynchronous transfer mode (ATM) as taught by Chiu et al. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (as suggested by Eames, see col. 1, lines 19 – 21).

Allowable Subject Matter

11. Claims 6, 7, 13, 14, 18, 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Richardson et al. (US 7203187 B1).
- b) Pitsoulakis (US 7092375 B2).
- c) Czerwec et al. (US 6314102 B1).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Andrew C Lee/

Examiner, Art Unit 2619

<8/4/2008>

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619